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10/772,449	02/06/2004	John F. Boon	026096-00006	5154
4372	7590	10/07/2009	EXAMINER	
ARENT FOX LLP			HU, KANG	
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SUITE 400			PAPER NUMBER	
WASHINGTON, DC 20036			3715	
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			10/07/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com

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Office Action Summary

Application No.

10/772,449

Applicant(s)

BOON, JOHN F.

Examiner

KANG HU

Art Unit

3715

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 March 2009.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 and 17-20 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-14 and 17-20 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 06 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/808)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Present office action is in response to amendment filed on 3/4/2009. Claims 15 and 16 were previously cancelled, claims 1-14, and 17-20 are currently pending in the application.

Priority

1. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 120 as follows: Claims 1, 10, 11 and 17 recites similar limitations "a method for providing an authoring tool, formatting the content for use with a query and response feature." The recited feature is not supported in applications 10/237,044, 09/455,160 and 09/042,635, where the current application is claiming priority through CIP. Therefore the application is only accord effective filing date of 2/6/2003 of the provisional application 60/445,235.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting

ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-14 and 17-20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 7,011,526 B2 as previously rejected in non-final action dated 12/29/2008 and are incorporated by reference.

Terminal Disclaimer

The application/patent being disclaimed has been improperly identified since the number used to identify the patent being disclaimed is incorrect. The correct number is US 7,011,526.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-9, and 17-20 are rejected under USC 101, the claimed invention is directed to non-statutory subject matter. In order for a claimed process to be considered statutory it must be: (1) tied to a particular machine or apparatus, or (2) transform a particular article into a different state or thing. The use of a specific machine or transformation of an article must impose meaningful limits on the claim's scope to impart patent-eligibility; the involvement of the machine or transformation in the claimed process must not merely be insignificant extra-solution activity; and the transformation must be central to the purpose of the claimed process. A showing

of a physical transformation requires an actual change in the state of a physical object involved in the process, such as a method for curing rubber. The pending claims are not drawn to such a process and therefore do not qualify as statutory subject matter under this prong of the test. Therefore the claimed method must be tied to a particular machine or apparatus. With respect to claims 1 and 17, the method performs providing an authoring tool for enhancing memory, the claims do not make any implicit or explicit recitations of a particular machine which is critically tied to the performance of the method. Claims 2-9 and 18-20 are also rejected for their dependency of claims 1 and 17 for failing to correct these deficiencies and therefore rejected for the same reason.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-14, and 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Schaack et al. (US 6,652,283 B1).

Re claims 1, 10, 11, and 17, Van Schaack teaches a method for providing an authoring tool for enhancing long-term memory, the method comprising:
providing a graphical user interface input for receiving content; receiving the content, the received content including at least one query input and associated response (col 4, lines 2-10:

allowing a user to encode, store and retrieve knowledge; col 9, lines 10-15: highly adaptive interface; fig 22: multimedia contents);
and formatting the content for use with a query and response feature (col 7, lines 1-5 and 18-24); wherein the query and response feature includes: providing each of the at least one query, each of the at least one query having an associated memory retention value which is a specific number measured on a scale (Fig 24; col 43, lines 5-24);

Van Schaack has number of score values associated with memory retention, one for example is shown in Fig 24, where the scores are rated from 1-5. Van Schaack teaches the specific number measure on a scale of memory retention value in col 43, specifically lines 10-20; Van Schaack also teaches of other factors such as the type and difficulty of the knowledge or skills, the user's performance in each of the modules of the system, the measured arousal and attention of the user, the measured confidence of the user in responding to the presentation of cues and responses and providing responses to cues, the number of times a paired-associated has been seen and etc. (col 16, lines 8-25);

receiving a response to each of the at least one query; evaluating the response to each of the at least one query; and updating the associated memory retention value for each of the at least one query based on the response to the evaluated response (col 17, lines 14-45: user's particular history; col 43, lines 1-23: quality of the response);

Van Schaack further teaches of scheduling review of the at least one query based on the associated memory retention value, (col 17, lines 14-45: determines that the memory strength for a particular item has decreased to the minimum retention level by making calculated projections based on the mathematical characteristics of the decline of human memory, the type and difficulty of the item and etc.)

Van Schaack does not explicitly teach of prior to the scheduled review of the at least one query, placing the at least one query in a passive display status, Van Schaack teaches that review sessions are scheduled so far apart in time, that the item can be considered to have entered a state of permastore... the item may be forgotten as a result of low memory activation and the user may experience a retrieval failure. This problem can be reduced or eliminated by scheduling review sessions of particularly important items to maintain a minimum desired level of activation (col 8, lines 5-17). Prior to the item being placed on the review list, Van Shaack teaches that the learning and the review module interactively adapts to the CS-US interval based on various factors such as the type and difficulty of the knowledge, measured confidence, measured probability of recall and etc. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Van Schaack to place query in a passive display status before scheduling review for the query as it will reinforce the memory of the student.

Van Schaack further teaches:

Re claim 2, each of the at least one query comprises a representation of a flash card (col 7, lines 18-28: content is preferably arranged in paired-associate format for ease of learning).

Re claim 3, at least one query comprises input selected from a group consisting of a graphical prompt, a text prompt, an audio prompt, and a video prompt (fig 22).

Re claim 4, at least one query comprises a plurality of linked prompts (col 8, lines 17-28: customized lessons).

Re claim 5, displaying a correct response to each of the at least one query (col 43, lines 1-10: correct response to be displayed).

Re claim 6, the correct response is displayed for a variable time period (col 47, lines 1-6: the answer remains for shorter or longer periods of time depending on user's response).

Re claim 7, the variable time period dynamically adjusts depending on number of incorrect answers to each of the at least one query received (col 16, lines 8-25, user's performance).

Re claim 8, repeating the providing of each of the at least one query at variable intervals, the intervals varying with response time taken for at least one previously received response (col 16, lines 8-25, latency of response of the user).

Re claim 9, at least one query includes: presenting a display of a representation of a query flash card, the query flash card including a query; and presenting a display of a plurality of selectable

responses to the query via a plurality of representations of answer flash cards (col 26, lines 35-43: alternative force-choice).

Re claims 12-14, the device 16: the device comprises a terminal, the terminal comprises a personal computer, and the display is coupled to a display processor, the display and display processor comprising a display terminal (col 7, lines 1-17);

Re claims 18-20, the multimedia output is a compact disk, voice and video stream (col 7, lines 1-17).

Response to Arguments

8. Applicant's arguments filed 3/4/2009 have been fully considered but they are not persuasive.

Applicant asserts that the methods of claims 1 and 17 require at least a graphical user interface input for receiving content, and therefore satisfies the U.S.C. 101 requirement. The examiner respectfully disagree, claims 1 recites "providing a graphical user interface input for receiving content", the applicant has not disclosed in the specification that a graphical user interface input is a physical device, furthermore one of ordinary skill in the art understands such input as a mere interface, not a physical device, therefore does not meet the requirements of patentable subject matter under U.S.C. 101. The applicant is advised to explicitly recite a particular machine which is critically tied to the performance of the method to meet the requirement under U.S.C. 101. Further, even were one to consider the graphical user interface to constitute a machine, the

interface is only included in the method for the collection of information and is not involved in the performance of the actually algorithm (such as formatting or scheduling). The collection of information is deemed to constitute a mere extra solution activity. The inclusion of a potential machine in this step, is not sufficient to meet the requirements of a critical tie.

Applicant further asserts that Van Schaack fails to teach placing the least one query in a passive display status prior to the scheduled review. The examiner admits that Van Schaack does not teach of a passive display “status”, however Van Schaack teaches of different modes of learning and testing based on various factors (col 16, lines 7-25) before such query is placed on a list for review. Therefore each of the learning including at least one of learning and testing displays the query passively before they’re put on the scheduled review. Therefore the argument is not persuasive, as the user can choose to refresh its memory of the item at any time before adding the item to the review list depending on its importance to the user, one of ordinary skill in the art would also recognize that flashcards are itself passive reviews, the flashcards provide users with paired-associate format for ease of learning.

With respect to applicant’s assertion that Van Schaack does not teach of a structure or device to display the query and an associated response, the examiner respectfully disagree, Van Schaack teaches that paired-associate learning method is embodied in a group of flashcards which may be presented manually or electronically via a computer (col 1, lines 32-35).

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KANG HU whose telephone number is (571)270-1344. The examiner can normally be reached on 8-5 (Mon-Thu).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Xuan Thai can be reached on 571-262-7147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kathleen Mosser/
Primary Examiner, Art Unit 3715

/K. H./
Examiner, Art Unit 3715